

IN THE CLAIMS:

This listing of claims will replace all prior versions and listings of claim in the application:

Listing of Claims

Claims 1-18 (canceled)

19. (currently amended) An integrated electronic system comprising:

a first current carrying transistor;

means for adjusting a threshold voltage of the current carrying transistor in response to a control voltage; and

means for supplying the control voltage connected to the means for adjusting the threshold voltage, operable to supply a first control voltage to select a low power mode and a second control voltage to select a higher power mode relative to the first low power mode; and

wherein the means for adjusting the threshold voltage of the current carrying transistor is a source resistance transistor connected between the current carrying transistor and a supply voltage, a control gate of the source resistance transistor being connected to the means for supplying a control voltage.

Claims 20-24 (canceled)

25. (previously presented) The integrated electronic system of claim 19, wherein the means for supplying the control voltage is a bond pad.

26. (previously presented) The integrated electronic system of claim 19, wherein the means for supplying the control voltage comprises selection circuitry on the same integrated circuit as is the current carrying transistor.

27. (currently amended) The integrated electronic system of claim 19, wherein the means for supplying the control voltage comprises selection circuitry connected to receive a clock signal, wherein the control voltage is selected based on a clock period of the clock signal.

28. (currently amended) The integrated electronic system of claim 27, wherein the selection circuitry further comprise comparison circuitry connected to receive a signal passed through the current carrying transistor and to compare this signal to the clock period.

29. (previously presented) The integrated electronic system of claim 19, wherein the means for supplying the control voltage is operable to be selected in a permanent fashion.

30. (previously presented) The integrated electronic system of claim 19, wherein the means for supplying the control voltage is operable to dynamically select a control voltage in response to a change in an operation condition of the integrated electronic system.

Claims 31-32 (canceled)

31. (currently amended) The integrated electronic system of claim ~~32~~ 19, wherein the source resistance transistor is connected in parallel with a conductive element.

34. (previously presented) The integrated electronic system of claim 33, wherein the conductive element is a transistor.

35. (currently amended) The integrated electronic system of claim ~~32~~ 19, wherein the source resistance transistor comprises a source region, a drain region, and a channel region, said source, drain, and channel region being of the same conductivity type.

36. (previously presented) An integrated electronic system comprising:
a first current carrying transistor;
means for adjusting a threshold voltage of the first current carrying transistor in response to a first control voltage;

a second current carrying transistor connected in series to the first current carrying transistor;

means for adjusting a threshold voltage of the second current carrying transistor in response to a second control voltage; and

means for independently supplying the first control voltage and the second control voltage.

37. (previously presented) An integrated electronic system comprising:

a plurality of transistors connected in series between a first voltage source terminal and a second voltage terminal;

a first transistor of the plurality of transistors being a first current carrying transistor having a control gate and a back-gate, with means for adjusting the threshold voltage of the first current carrying transistor by connecting the back-gate to a selected one of a first plurality of voltage terminals; and

a second transistor of the plurality of transistors being a source resistance transistor having a control gate, with means for connecting the control gate of the source resistance transistor to a selected one of a second plurality of voltage terminals.

38. (previously presented) The system of Claim 37, wherein the back-gate connection comprises a connection to the substrate associated with the first current carrying transistor.

39. (previously presented) The system of Claim 37, wherein a third transistor of the plurality of transistors is a second current carrying transistor having a control gate and a back-gate, with means for adjusting the threshold voltage of the second current carrying transistor by connecting the back-gate of the second current carrying transistor to a selected one of a third plurality of voltage terminals.

40. (previously presented) The integrated system of claim 39 wherein the first current carrying transistor is an n-channel transistor and the second current carrying transistor is a p-channel transistor.